## Electric Reliability Inspection and Maintenance Programs Illinois District

**Tree Trimming Program** – The Illinois transmission and distribution circuits are trimmed on a 3-year cycle. The transmission system is patrolled semi-annually for potentially hazardous situations.

Total expenditure in 1999: \$1,932,000

**Transmission and Distribution Circuit Inspection** – Illinois underground and overhead distribution circuits and poles are patrolled and inspected on a 10-year cycle. Illinois transmission circuits and poles are patrolled and inspected on a 10-year cycle. In addition, transmission lines are inspected by air or by drive-by at least annually for general condition, damage and right-of-way encroachments. Any problems found are scheduled for maintenance.

Total expenditure in 1999: \$161,032

**Transmission Wood Pole Plant Inspection** – Illinois transmission wood pole plant is inspected and treated, if needed, on a 10 year cycle.

Total expenditure in 1999: \$34,315

**Distribution Switch Inspection** – Illinois overhead and underground switches are inspected and maintained on a 10-year cycle.

Total expenditure in 1999: \$19,035

**Capacitor Inspection Program** – Illinois capacitor banks are inspected and repaired, if needed, on a 3, 5, or 8-year cycle, depending on the type of control used.

Total expenditure in 1999: \$70,370

**Line Recloser Inspection Program** – Illinois single phase and three phase line reclosers are inspected monthly. These units are maintained on a 2, 3, or 5 year cycle depending on the type of unit.

Total expenditure in 1999: \$6,125

**Voltage Regulator Inspection Program** – Illinois single phase regulators are removed and serviced in-house on a 3-year cycle. Three phase regulators are inspected and serviced in the field on a 5-year cycle.

Total expenditure in 1999: \$5,228

**Animal Guard Program** – On an as needed basis, Illinois distribution circuits are identified for animal guard installation based on animal interruption history and operating experience. Eight circuits have been identified for animal guard installation in 2000 and 2001. The eight circuits identified are: 13-S-7, 13-36-1, 13-42-1, 13-38-5, 13-PU-1, 13-46-1, 13-111-3, and 13-40-2. These circuits serve areas in the Milan, Moline, East Moline, Rock Island, and rural areas west of Orion, Illinois.

Total expenditure in 1999: \$34,020 (two circuits: 13-27-1 and 13-22-5)

**Transmission Line Spacer Replacement** – Illinois transmission line spacers that are nearing the end of their useful lives are being replaced. Icing and wind conditions cause transmission line conductors to gallop which may result in an outage due to phase-to-phase contact. Spacers prevent phase-to-phase contact during galloping and the resultant outage. In 1999 spacers were replaced on circuits 161-39-48-1 and 161-48-A-1 at a cost of \$113,265. In 2000, spacers will be replaced on circuits 161-18-43-1, 161-43-39-1, 66-22-37-1, 66-37-46-1, 66-37-E-1 and a 3 mile section of 66-18-1 at a total cost estimated cost of \$298,115.

Total expenditure in 1999: \$113,265 (two circuits, 161-39-48-1 and 161-48-A-1)